

**Amendments to Claims**

This listing of Claims will replace all prior versions and listings of claims in the application.

**Claim 1.** (currently amended) An isolated polynucleotide comprising:

- (a) a nucleotide sequence encoding a polypeptide having lipoxygenase activity, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:~~2, 4, 6, 8, 10, 12, 14, 16, or 18~~ have at least 80% sequence identity based on the Clustal alignment method, or
- (b) the complement of the nucleotide sequence, wherein the complement and the nucleotide sequence contain the same number of nucleotides and are 100% complementary.

**Claim 2.** (currently amended) The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:~~2, 4, 6, 8, 10, 12, 14, 16, or 18~~ have at least 85% identity based on the Clustal alignment method.

**Claim 3.** (currently amended) The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:~~2, 4, 6, 8, 10, 12, 14, 16, or 18~~ have at least 90% identity based on the Clustal alignment method.

**Claim 4.** (currently amended) The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:~~2, 4, 6, 8, 10, 12, 14, 16, or 18~~ have at least 95% identity based on the Clustal alignment method.

**Claim 5.** (currently amended) The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide comprises the amino acid sequence of SEQ ID NO:~~2, 4, 6, 8, 10, 12, 14, 16, or 18~~.

**Claim 6.** (currently amended) The polynucleotide of Claim 1 wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:~~1, 3, 5, 7, 9, 11, 13, 15, or 17~~.

**Claim 7.** (original) A vector comprising the polynucleotide of Claim 1.

**Claim 8.** (original) A recombinant DNA construct comprising the polynucleotide of Claim 1 operably linked to a regulatory sequence.

**Claim 9.** (original) A method for transforming a cell, comprising transforming a cell with the polynucleotide of Claim 1.

**Claim 10.** (original) A cell comprising the recombinant DNA construct of Claim 8.

**Claim 11.** (original) A method for producing a plant comprising transforming a plant cell with the polynucleotide of Claim 1 and regenerating a plant from the transformed plant cell.

**Claim 12.** (original) A plant comprising the recombinant DNA construct of Claim 8.

**Claim 13.** (original) A seed comprising the recombinant DNA construct of Claim 8.

**Claim 14.-20.** (canceled)